

Foreign body

For other uses of this term, see [foreign body \(disambiguation\)](#).

A **foreign body** or sometimes known as **FB** (Latin: *corpus alienum*) is any object originating outside the body. In machinery, it can mean any unwanted intruding object.

Most references to foreign bodies involve propulsion through natural **orifices** into hollow organs.

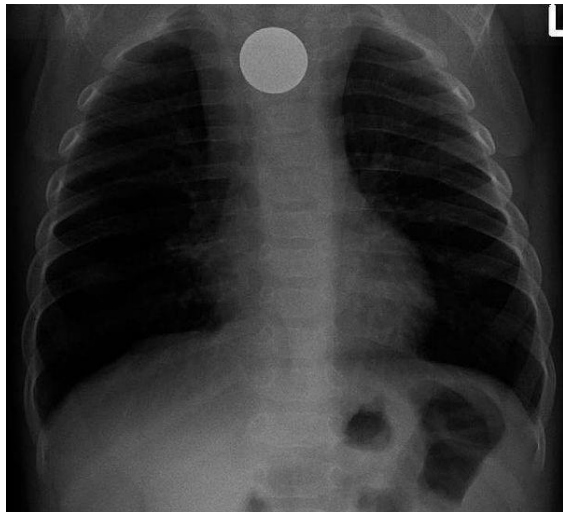
Foreign bodies can be inert or irritating. If they irritate they will cause **inflammation** and **scarring**. They can bring **infection** into the body or acquire infectious agents and protect them from the body's **immune defenses**. They can obstruct passageways either by their size or by the scarring they cause. Some can be **toxic**.

With sufficient force (as in firing of **bullets**), a foreign body can become lodged into nearly any tissue.

1 Alimentary tract

Main article: [Foreign body in alimentary tract](#)

One of the most common locations for a foreign body is

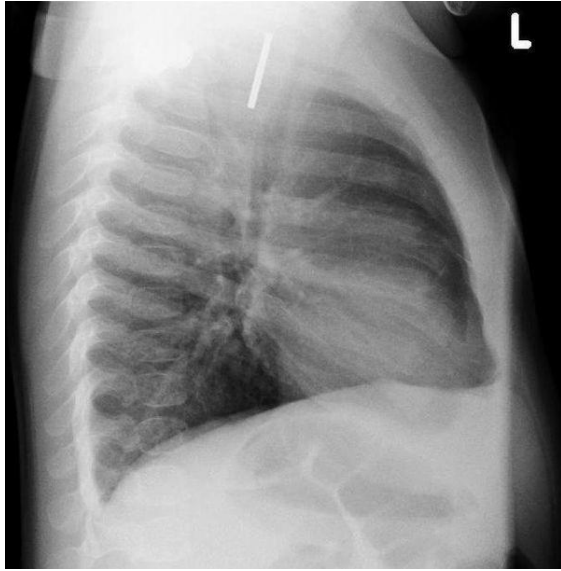


A coin seen on AP CXR in the esophagus

the **alimentary tract**.

It is possible for foreign bodies to enter the tract from the mouth, or from the rectum.

Both children and adults experience problems caused by foreign objects getting stuck in their bodies. Young chil-



A coin seen on lateral CXR in the esophagus

dren, in particular, are naturally curious and may intentionally put shiny objects, such as coins or button batteries, into their mouths. They also like to stick things in their ears and up their noses.^[1] The effect of a foreign body can be very different. For example, a coin causes local pressure on the tissue but generally, is not a medical emergency to remove. A button battery, which can be a very similar size to a coin, generates hydroxide ions at the anode and causes a chemical burn in 2 hours.^[2] An ingested button battery that is stuck in the esophagus is a medical emergency. In 2009, Avolio Luigi and Martucciello Giuseppe showed that although ingested nonmagnetic foreign bodies are likely to be passed spontaneously without consequence, ingested magnets (magnetic toys) may attract each other through children's intestinal walls and cause severe damage, such as pressure necrosis, perforation, intestinal fistulas, volvulus, and obstruction.^[3]

2 Airways

Main article: [airway management](#)

It is possible for a foreign body to enter the airways and cause [choking](#).^[4]

In one study, [peanuts](#) were the most common obstruction.^[5] In addition to peanuts, hot dogs, and

1

2

6 OTHER

grapes, latex balloons are also a serious choking hazard in children that can result in death. A latex balloon will conform to the shape of the trachea, blocking the airway and making it difficult to expel with the Heimlich maneuver.^[6]

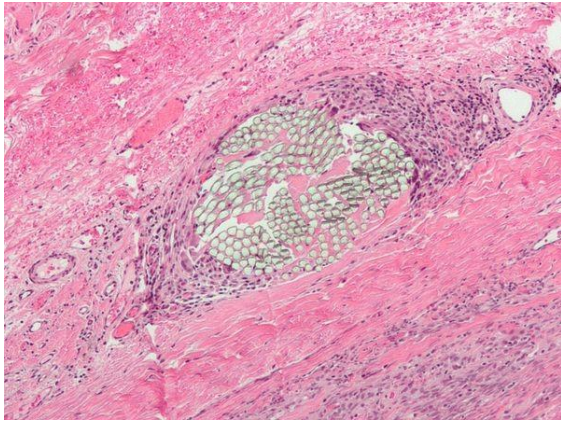
Foreign body in the bronchi can also present as chronic cough.^[7]

3 Eyes

Airborne particles can lodge in the eyes of people at any age. These foreign bodies often result in [allergies](#) which are either temporary or even turn into a chronic allergy. This is especially evident in the case of [dust](#) particles.

It is also possible for larger objects to lodge in the eye. The most common cause of intraocular foreign bodies is [hammering](#).^[8]

4 Skin



Surgical suture. H&E stain.

Splinters are common foreign bodies in skin. *Staphylococcus aureus* infection often causes boils to form around them.^[9]

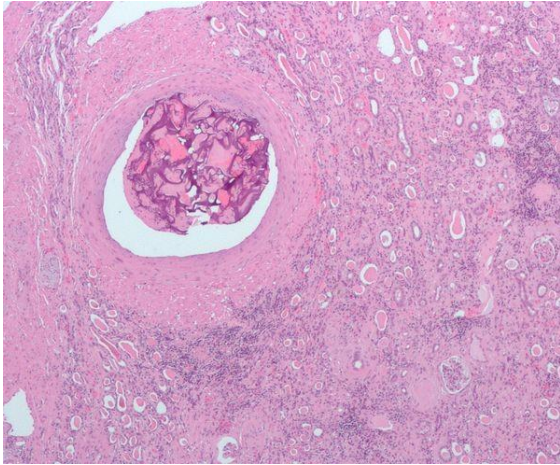
Tetanus prophylaxis may be appropriate.^[10]

5 Peritoneum

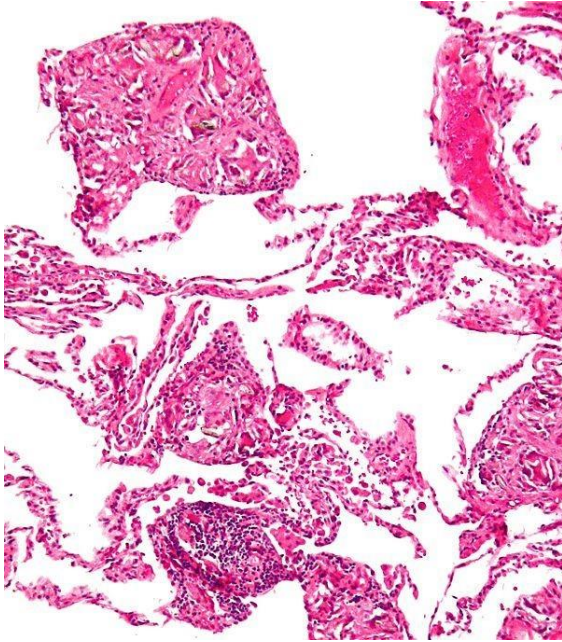
Foreign bodies in the peritoneum can include retained surgical instruments after abdominal surgery. Rarely, an intrauterine device can perforate the uterine wall and enter the peritoneum.

Foreign bodies in the peritoneum eventually become contained in a foreign body granuloma. In the extremely rare case of retained ectopic pregnancy, this forms a lithopedion

6 Other



*Foreign material in a blood vessel due to an **embolization** procedure.*



Talcosis of the lung due to intravenous drug use. H&E stain.

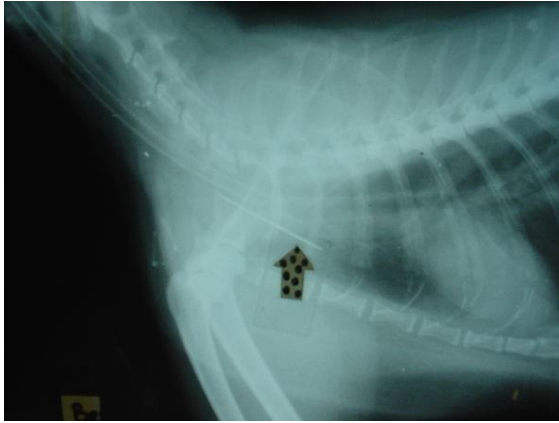
Foreign bodies can also become lodged in other locations:

- anus or rectum^[11]
- blood vessels or thoracic system^[12]
- ears^[13]

- nose^[14]
- urethra^[15]
- vagina^[16]



Bottle top swallowed by a dog



Needle swallowed by a cat

7 In other animals

Foreign bodies are common in animals, especially **dogs** and **cats**. Dogs will readily eat toys, bones, and any object that either has food on it or retains the odor of food. Unlike humans, dogs are susceptible to gastrointestinal obstruction due to their ability to swallow relatively large objects and pass them through the **esophagus**. Foreign bodies most commonly become lodged in the **stomach** because of the inability to pass through the **pyloric sphincter**, and in the **jejunum**. Symptoms of gastrointestinal obstruction include vomiting, abdominal pain, and depression due to **dehydration**. **Peritonitis** results if either the stomach or intestine has ruptured. Foreign bodies in the stomach can sometimes be removed by **endoscopic** retrieval or if necessary by **gastrotomy**. Foreign bodies in the jejunum are removed by **enterotomy**.

Certain foreign bodies in animals are especially problematic. Bones or objects with sharp edges may cause tearing of the wall of the esophagus, stomach, or small intestine and lead to peritonitis. **Pennies** swallowed in large numbers may cause **zinc** poisoning, which in dogs leads to severe **gastroenteritis** and **hemolytic anemia**. **Linear**

foreignbodies can especially be dangerous. A linear foreign body is usually a length of string or yarn with a larger ob3

ject or clump of material at either end. One end is usually lodged in the stomach or proximal small intestine and the other end continues to travel through the intestines. The material becomes tightly stretched and the intestines may “accordion up” on themselves or be lacerated by it.^[17] This is especially common in cats who may enjoy playing with a ball of string or yarn. Sometimes the linear foreign body anchors in the mouth by catching under the tongue.^[18] Pantyhose is a common linear foreign body in dogs.

8 See also

- *101 Things Removed from the Human Body*